

CLAIMS

What is claimed is:

- 1 1. A system for providing a communication service in a computer  
2 network, comprising:  
3 a terminal having an identifier;  
4 a gateway coupling the terminal to the communication service;  
5 an access point coupled to the gateway through which the  
6 terminal may have access to the communication service; and  
7 a server connected to the gateway, wherein the server  
8 comprises: information of the identifiers of valid terminals, a  
9 configuration tool for managing a plurality of configurable controlling  
10 functions of a browser remotely from the terminal.
- 1 2. A system of claim 1, further comprising:  
2 a computer network; and  
3 a remote server coupled to the computer network;  
4 wherein the controlling functions are shared between the terminal  
5 and the remote server.
- 6 3. The system of claim 2, wherein the remote server enables a browser  
7 session as defined in the server.  
8
- 1 4. A system of claim 1, further comprising; an internet service point;  
2 wherein the access point establishes a connection with the gateway to obtain  
3 address of the internet service point.

1 5. A system of claim 4, wherein the terminal receive information of a  
2 plurality of MDA services as addressed from the access point.

3 6. A system of claims 4 or (5), wherein an access certificate of the access  
4 point is stored in the terminal.

1 7. A system of claim 1, further comprising:

2 an internet service point;

3 a computer network; and

4 a remote server coupled to a computer network ,

5 wherein the access point establishes connection further to the  
6 internet service point , which establishes a connection with the  
7 gateway to validate the terminal.

1 8. A system of claim 7, wherein the terminal receives information of a  
2 plurality of MDA servicess as addressed from the internet service point.

1 9. A system of claims 7 or (8), wherein the an access certificate of the  
2 internet service point is stored in the access point

1 10. A system of claims 7 or (8), wherein the an access certificate of the  
2 internet service point is stored in the terminal.

1 11. A system of claims 4, 5, 7 or (8), wherein an access certificate of the  
2 MDA services is stored in the terminal.

1 12. A system of claims 4,5, 7 or (8) wherein an access certificate of the  
2 MDA services is stored in the access point.

1 13. A system of claims 7 or 8, wherein an access certificate of the MDA  
2 services is stored in the internet service point.

1 14. The system of claims 1, 2, 3, 5 or 8 wherein a browser session may  
2 be configured remotely.

1 15. The system of claims 2 or 3, wherein the remote server enabling a  
2 browser session may be configured remotely, the configuration being  
3 originated from a management server.

1 16. The system of claim 15, wherein the management server is provided  
2 by an end service provider.

1 17. The system of claim 15, wherein the configuration comprises a plurality  
2 of browser specific configuration parameter items.

1 18. The system of claim 17, wherein at least one of the plurality of browser  
2 specific configuration parameter items is a cookie.

1 19. The system of claim 17, wherein at least one of the plurality of browser  
2 specific configuration parameter items is a bookmark.

1 20. The system of claim 19, wherein the bookmark comprises an address  
2 to an advertiser server.

1 21. A system for providing a communication service in a computer  
2 network, comprising:  
3 a plurality of terminals with identifiers;  
4 a plurality of gateways respectively coupling the terminals to the  
5 communication service;  
6 a plurality of access points respectively coupled to the gateways,  
7 through which the terminals are accessed to the communication  
8 service; and  
9 a plurality of servers respectively coupled to the gateways,  
10 wherein the servers have information of valid terminal identifiers;  
11 and wherein each server comprises: a plurality configuration  
12 tools for managing at least some of configurable controlling  
13 functions of a browser remotely from the respective terminal.

1 22. The system of claim 21, wherein in the network further comprises a  
2 remote server, comprising:  
3 a general section of the browsing functions; and  
4 a terminal specific section of the browsing functions.

1 23. The system of claim 22, wherein the general and terminal specific  
2 sections of the browsing function allow one browsing session login.

1 24. The system of claims 21, 22 or 23, wherein a browser session may be  
2 configured remotely, the configuration being originated from the server  
3 providing information services to users of the network.

1 25. The system of claim 24, wherein the configuration may be originated  
2 from a management server.

1 26. The system of claim 25, wherein the management server is provided  
2 by an end service provider.

1 27. The system of claim 24, wherein in each remote server, the general  
2 and terminal specific sections of the browsing function resulting in at least two  
3 browsing sessions as defined in a server in such a way, that terminal specific  
4 sections of each browsing session are session independent.

1 28. The system of claim 24, wherein the configuration comprises a plurality  
2 of browser specific configuration parameter items.

1 29. The system of claim 28, wherein at least one of the plurality of browser  
2 specific configuration parameter items is a cookie.

1 30. The system of claim 28, wherein at least one of the plurality of browser  
2 specific configuration parameter items is a bookmark.

1 31. The system of claims 1, 2, 21, 22, or 23, wherein a user of the terminal  
2 may configure a browser service program to provide a user defined look and  
3 feel in user interface of the terminal.

1 32. The system of claim ~~32~~<sup>31</sup>, wherein a software related object may be  
2 downloaded into the terminal.

1 33. The system of claim 1, wherein the server providing information  
2 management services is capable of receiving a plurality of software related  
3 objects that are enabled to be downloaded from the Internet network coupled  
4 to the server.

1 34. The system of claim 1, wherein the terminal further comprises:  
2 an operating system including a driver resident in hardware of the  
3 operating system;

- 4 a touch sensitive display coupled to the operating system for  
5 graphical display of information; and  
6 a user interface coupled to the operating system for providing the  
7 user with selection and input control.

1 35. The system of claims 1, 2, 5, 8, 21, 22, 23, 33 or 34, wherein the  
2 terminal further comprises:

- 3 a browser specific control section having specific parameter  
4 content.

1 36. The system of claim 34, wherein the terminal further comprises;  
2 a defined language used as a communication language in the  
3 user interface of the terminal.

1 37. The system of claim 36, wherein the defined language used as the  
2 communication language in the user interface is independent of the end user  
3 application.

1 38. The system of claims 1, 2, 5, 8, 21, 22, 23, 33 or 34, wherein the  
2 terminal further comprises: an XML conversion unit so that the information  
3 received in XML format may be interpreted into XSL format.

1 39. A method for providing communication services in a computer network,  
2 comprising the steps of:

- 3 powering on a terminal with an identifier;  
4 communicating through a gateway from the terminal to the  
5 communication services;

6           accessing the communication services with the terminal through  
7           an access point coupled to the gateway, and  
8           offering reduced service to an user with default settings saved in  
9           terminal.

1   40.   A method for providing communication services in a computer network,  
2   comprising the steps of:

3           powering on a terminal with an identifier;

4           communicating through a gateway from the terminal to the  
5           communication services;

6           accessing the communication services with the terminal through  
7           an access point coupled to the gateway,

8           connecting a server to the gateway, the server having information  
9           of the valid terminal identifiers enabling communication services,

10          managing by a configuration tool in the server at least some of  
11          configurable controlling functions of a browser remotely from the  
12          terminal.

1   41.   The method of claim 40, wherein the step of establishing comprises  
2   the step of downloading a user profile for configuration of the terminal in  
3   accordance with the established browser service session.

1   42.   The method of claim 40, further comprising the steps of:

2           determining if the user has requested an individual  
3           communication session;

4           authenticating the user to establish the individual communication  
5           session; and

6 terminating the individual communication session and returning to  
7 the browser service session.

1 43. The method of claims 39 or 40, wherein the individual communication  
2 session is terminated based on request from the user.

1 44. The method of claim 39 and 40, wherein the individual communication  
2 session is terminated upon expiration of a predetermined period of time  
3 without user input.

1 45. The method of claim 40 further comprising the steps of:  
2 establishing a communication link between the terminal and an  
3 Internet Service Provider;  
4 retrieving the Internet address of a global address server;  
5 sending a request to the global address server, wherein the  
6 request is a request for the remote server's Internet address;  
7 receiving the Internet address of the remote server from the  
8 global address server and a validation register;  
9 sending a request to the validation register with terminal ID;  
10 transmitting both identification information unique to the terminal  
11 and the Internet address of the terminal from the terminal to Internet  
12 address of the server for authentication by the server for the validated  
13 terminal; and  
14 authenticating the terminal to establish the shared communication  
15 session.



1 46. A apparatus to activate a configuration tool in a server for managing  
2 remotely a configurable controlling function of a browser of a terminal  
3 comprising:

4 a gateway;

5 an access point,

6 a management server of the terminal service provider 37 in which  
7 a configuration management tool is located; and

8 a database 108 containing advertisement control information,  
9 comprising:

10 the management server of the terminal system provider 37  
11 receiving an advertisement configuration message from the server of  
12 advertiser 110,

13 the received configuration information is saved in the database  
14 of the management server,

15 the configuration tool manager for upgrading information in the  
16 server 28 resulting in a new advertisement configuration to be used in  
17 the browser session of the terminal when the terminal is powered on.

1 47. A method to activate a configuration tool in a server for managing a  
2 configurable controlling function of a the terminal system comprising the steps  
3 of:

4 sending a configuration upgrade message from server;

5 saving upgrade information in a database;

6 identifying a plurality of users requiring at least partial software  
7 upgrade; and

8 upgrading the server.

1 48. The method of claim 47, wherein to activate the configuration tool in  
2 the server for managing the configurable controlling function of a browser of  
3 the terminal comprising the information updated to server is further on  
4 updated to terminal equipment (20, 20a, 20b, 20c).

1 49. The method to activate the configuration tool in the server for  
2 managing a configurable controlling function of a browser, comprising the  
3 steps of:

4 receiving an initial upgrade message in the server from service  
5 provider 112 to provide an end service product;

6 receiving end service product;

7 saving the received end service product in a database 109; and

8 Identifying a plurality of users having a contract resulting a  
9 product transfer remote server 28 get the product information to the  
10 server requiring the provided service information.

1 50. The method of claim 49, wherein the end service product is transferred  
2 to the server 28 and a virus search is made to the end service product prior to  
3 conveying the product to the server.

1 51. The terminal comprising:

2 a display 70 with drivers for controlling display;

3 a user interface (UI) framework 72 coupled to the display;

4 a browser 74 coupled to the user interface framework; and

5 means for browsing control comprising configuration parameters  
6 defining look and feel of the user interface framework to display.

1 52. The terminal of claim 51, wherein the parameter is configured to have  
2 specific content of a browser service program resulting in customizable look  
3 and feel of the user interface of the terminal.

1 53. The terminal of claim ~~54~~<sup>52</sup>, wherein the specific configuration content of  
2 the browsing service program is downloaded from a network.

1 54. The terminal of claim 53, wherein the terminal is coupled to the  
2 network via a gateway and a remote server.

1 55. The terminal of claim 51, wherein the terminal further comprises:  
2 an operating system including a driver resident in hardware of the  
3 operating system;  
4 a touch sensitive display coupled to the operating system for  
5 graphical display of information; and  
6 a user interface coupled to the operating system for providing the  
7 user with selection and input control.

1 56. The terminal of claim 51 or ~~55~~<sup>56</sup>, wherein the terminal further comprises:  
2 a browser specific control section having specific parameter  
3 content supporting a configuration parameter item of a browser.

1 57. The terminal of claim 56, wherein the configuration parameter item is a  
2 cookie.

1 58. The terminal of claim 56, wherein the configuration parameters are  
2 downloaded from a server to the terminal to be split between the terminal and  
3 the server.

1 59. The terminal of claim 51 or 55, wherein the terminal further comprises:  
2 a browser specific control section; and  
3 a user interface in which a symbolic password may be inputted.

1 60. The terminal of claim 51 or 55, wherein the terminal to serve on  
2 individual user services.

1 61. The terminal of claim 51 or 55, wherein the terminal further comprises:  
2 a terminal identification information; and  
3 a global unit address information,  
4 wherein a server address request message is sent to address of  
5 the global unit wherein the message comprises the terminal  
6 identification information.

1 62. The terminal of claim 51 or 55, wherein the terminal further comprises:  
2 a first terminal identification information;  
3 a second terminal identification information; and  
4 a global unit address information,  
5 wherein a server address request message is sent to address of  
6 the global unit wherein the message comprises the second terminal  
7 identification information.

1 63. The terminal of claim 62, wherein the message comprises the first and  
2 the second terminal identification information.

1 64. A remote server 38 for providing communication service between the  
2 network and a plurality of terminals 20, 20a, 20b, 20c in a communication  
3 network coupled to an ISP, comprising:

4 a support server unit 46 receiving service parameters of a  
5 terminal from the network;

6 a database 52 for storing the service parameters in the remote  
7 server;

8 a plurality of browsing client object specific units 68, 68a, 68b  
9 using the locally stored service parameters, which are system  
10 parameters and user interface control parameters, which are applied  
11 during browser session;

12 wherein the system parameters support communication service  
13 offered to the terminal when the terminal is a non-MDA system  
14 terminal.

1 65. A remote server of claim 64 further comprising:

2 a network application server 50 controlling the application specific  
3 parameters of a connection service;

4 resulting the application specific parameters support  
5 communication service offered to the terminal when the terminal is a  
6 MDA system terminal.